

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
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Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems)	ET Docket No. 00-258
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Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands)	WT Docket No. 02-8
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)	

To: The Commission

**REPLY COMMENTS OF ARRL, THE NATIONAL ASSOCIATION
FOR AMATEUR RADIO**

ARRL, the National Association for Amateur Radio, also known as the American Radio Relay League, Incorporated (ARRL), by counsel, hereby respectfully submits its Reply Comments in response to the *Fourth Notice of Proposed Rule Making* (the 4th NPRM), FCC 03-134, released July 7, 2003 in the captioned proceeding. These Reply Comments are timely filed. ARRL's comments in this proceeding were filed November 3, 2003. In response principally to the comments of the Aerospace and Flight Test Radio Coordinating Council (AFTRCC), ARRL states as follows:

1. ARRL's Comments in this proceeding addressed the specific portion of the 4th NPRM which proposed to amend Part 2 of the Commission's Rules to permit Federal government aeronautical mobile facilities and non-government aeronautical flight test telemetry to operate at 2390-2395 MHz. This proposal was a component of the

Commission's effort to reaccommodate uses displaced from, *inter alia*, 1710-1850 MHz, which were allocated to accommodate Advanced Wireless Systems. ARRL's comments stated that government incumbents in the AWS bands might be accommodated at 2390-2395 MHz, sharing compatibly with the Amateur Service. The Amateur Service would retain its primary allocation status in the band. ARRL had previously asked the Commission to conduct the necessary compatibility studies together with NTIA to determine which Government services might be compatible with Amateur operations and which might not. Though the Commission did not, apparently, conduct any compatibility studies, ARRL stated that it remained confident that the co-Primary allocations envisioned for 2390-2395 MHz will, in the end, prove compatible, provided that there is active frequency coordination involved. *The need for active frequency coordination is especially compelling with respect to non-government flight test telemetry.* Though conducted in remote areas, the potential for interference from flight test operations is not nominal under all circumstances. ARRL's comments stated that it expected the Commission to determine that ongoing coordination efforts as between ARRL and AFTRCC are in the public interest and should be conducted. ARRL stated that it is familiar with AFTRCC and its expertise in coordination of periodic, itinerant and mobile uses in bands allocated to flight test telemetry, and ARRL looked forward to cooperative coordination efforts in this band.

2. ARRL's comments stated its belief that, if active coordination efforts are conducted between AFTRCC and ARRL, it would not appear necessary to impose any restrictions on either Amateur or mobile uses of the 2390-2395 MHz band. This is especially true inasmuch as flight test telemetry is conducted in specific remote locations.

ARRL proposed to conduct notifications with AFTRCC as necessary for amateur operations within certain geographic areas, and would expect AFTRCC to cooperate in most instances, given the alternative bands for flight test telemetry that now exist. Similarly, if certain ongoing, continuous Amateur use within an area in close geographic proximity to flight test locations can be accommodated in an alternative band or segment, the Amateur operations can be expected to be moved as necessary to avoid interference.

3. For the above reasons, ARRL stated its view that government aeronautical mobile operations and non-government flight test telemetry can be accommodated at 2390-2395 MHz without substantially reducing the availability of this band for Amateur operations in the entire 2390-2400 MHz band. A co-Primary allocation in the 2390-2395 MHz segment as proposed appears workable, and ARRL is willing to conduct necessary, ongoing frequency coordination efforts (with the help and database management of local or regional amateur radio coordination groups where available). Finally, ARRL's comments reiterated its strong belief that other commercial operations should remain excluded from the 2390-2400 MHz band entirely, as those operations are, generally speaking, fundamentally incompatible with Amateur operation in that band. With the compromises necessary in Amateur use of the 2390-2395 MHz segment, and the necessity in some instances in certain areas for certain Amateur stations to utilize the 2390-2395 MHz segment as part of a coordinated sharing effort with flight test telemetry operations, 2395-2400 MHz must remain an exclusive Amateur Primary allocation.

4. Few comments addressed the Commission's proposal to permit Federal government aeronautical mobile facilities and non-government aeronautical flight test telemetry to operate at 2390-2395 MHz. Motorola noted in this proceeding simply that it

supports the proposal to allocate the 2360-2395 MHz band for aeronautical mobile operations on a primary basis. This, it says, would allow the Department of Defense to relocate all aeronautical telemetry and video systems that currently operate in the 1710-1755 MHz band to the 2360-2395 MHz band. Motorola believes that this relocation is critical to permit AWS operations to commence in the 1710-1755 MHz band. Motorola noted that there had been very little interest expressed in the 2385-2395 MHz band in comments in the Docket 00-221 proceeding. ARRL does not disagree with any of Motorola's assessment.

5. However, the comments of AFTRCC in this proceeding justify a response. It is to be noted at the outset that, *immediately subsequent to the comment date in this proceeding, ARRL and AFTRCC have conferred, and have agreed to cooperatively develop some coordination procedures that, it is believed, will lead to a compatible, co-primary sharing plan for the 2390-2395 MHz segment.* ARRL believed, and continues to believe, that this will result in a harmonious arrangement, which will not significantly disrupt ongoing and developing Amateur operations. It will also allow flight test telemetry, which is already permitted at 2360-2385 MHz, and which was formerly (and now again) permitted at 2385-2390 MHz, to expand upward to 2395 MHz. ARRL looks forward to continued dialog with AFTRCC on this issue.

6. It is understood that AFTRCC, when preparing its comments, did not anticipate the opportunity to develop a compatible sharing arrangement at 2390-2395 MHz with the Amateur Service, and the AFTRCC comments reflected its interest in obtaining the additional allocation for flight test telemetry. Nor is it necessary for the Commission to view the allocation as an "either/or" situation: both flight test telemetry and Amateur

Radio operation can be accommodated. However, it is necessary for ARRL to note that there is not a quantified need for additional flight test telemetry spectrum in the 2 GHz range. All that AFTRCC claims as a justification for its need for 2390-2395 MHz is increased data rates, and the loss of 2310-2360 MHz over time. As noted previously by ARRL, AFTRCC has been and remains able to accommodate, by careful coordination in existing flight test telemetry allocations, substantial itinerant, temporary wideband video production operations, which the Commission permits by Special Temporary Authority. Such coordinated operation occurs at both 1435-1535 MHz and at 2360-2385 MHz now. This process is good for all concerned: it permits efficient use of flight test telemetry spectrum; it is an excellent prototype for secondary markets in spectrum; and it allows two types of periodic uses, either of which alone would be inefficient and would not justify an exclusive allocation because neither flight test telemetry nor video production operations are continuous. The public is benefited by television coverage of sporting and other newsworthy events which could not exist otherwise due to limited and overused Broadcast Auxiliary allocations, and flight tests are not subject to interference. This exact same process can be invoked at 2390-2395 MHz, except that the two uses involved are flight test telemetry and Amateur Radio.

7. As noted above, it is believed that it is no longer the position of AFTRCC that, as it asserted at page 4 of its comments in this proceeding, "any new Amateur use of [the 2390-2395 MHz] band should be precluded, and any existing usage grandfathered but on a secondary basis." ARRL would nevertheless respond that the only justification for this rather arbitrary proposal, found only within the four corners of the AFTRCC comments, is an unquantified "risk of interference" to flight test operations and a qualitative

comparison of the relative values to the public of Amateur television and flight test telemetry. First of all, ARRL's comments clarified that Amateur television is not the sole Amateur use of the 2390-2395 MHz segment. Second, the provision of Amateur video and developing wideband data in this band in support of public safety in some urbanized areas is a substantial public interest benefit that is not to be denigrated. The Commission need not, in any case, attempt to “make the cut” in this instance. AFTRCC's fear of interference is substantial only where Amateur operations and flight test telemetry are not coordinated, which need not occur. AFTRCC well knows that terrestrial and even other aeronautical uses of flight test telemetry allocations by other services, including wideband video operations, are practical and ongoing. It has developed an extensive secondary market operation premised on coordination with a dissimilar service. Thus, the suggestion that any restriction on Amateur operation is necessary to protect against interference to flight tests (other than a coordination requirement) is sophistry.

8. As discussed above, ARRL looks forward to finalizing with AFTRCC a cooperative, compatible sharing plan that allows co-primary Amateur and flight test operations in the 2390-2395 MHz band. ARRL expects the Commission to recognize its continuing obligations under the 1993 *Omnibus Budget Reconciliation Act*, 47 U.S.C. §§ 923(c)(1)(C)(iii) to avoid excessive disruption of Amateur operation in bands reallocated from Federal government use, which bands include 2390-2400 MHz.

Therefore, the foregoing considered, ARRL, the National Association for Amateur Radio, again respectfully recommends that the Commission (1) proceed with the allocations proposed in the 4th NPRM; (2) specifically affirm the need for cooperative frequency coordination efforts as between Federal and non-Federal government flight test

telemetry and other aeronautical mobile uses in the 2390-2395 MHz band; and (3) make no allocation changes in the 2395-2400 MHz band.

Respectfully submitted,

ARRL, the National Association For Amateur Radio

225 Main Street
Newington, CT 06111-1494

By: _____
Christopher D. Imlay
Its General Counsel

Booth, Freret, Imlay & Tepper, P.C.
14356 Cape May Road
Silver Spring, MD 20904-6011
(301) 384-5525

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